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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,360	03/06/2001	Edward L. Schwartz	74451.P127D4	4279

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EXAMINER

CHEN, WENPENG

ART UNIT PAPER NUMBER

2624

DATE MAILED: 02/24/2004

15

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/801,360

Applicant(s)

SCHWARTZ ET AL.

Examiner

Wenpeng Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8</u> . | 6) <input type="checkbox"/> Other: ____ |

Inventorship

1. Receipt is acknowledged of the statement, requesting that Kok Gi Wu be deleted as named inventor, which was filed on 8/16/2002.

Examiner's Statement

2. The amendment filed on 10/31/2002 has been entered as paper #11.

Drawings

3. The drawings are objected to because of the following informalities.

-- The labels are in handwritten form and difficult to recognize.

-- In Fig. 3(a), the numerals "320" and "321" shall be replaced with "310" and "311", respectively.

Correction is required.

4. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities:

-- In page 49, line 8, the word [times] shall be replaced with - tiles -.

Appropriate correction is required.

Claim Objections

6. Claim 17 is objected to because of the following informalities:

-- Claim 17 recites a method defined by various means.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 18-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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Claims 18-21 all require a feature of "replacing useless data in a marker." With regard to Claims 18-21, the Examiner found only the following passages to support the claims in page 51:

In still another embodiment, coded data may be put at end of files by manipulating tile headers and putting invalid file data in COM markers.

It is well documented in JPEG standard that a COM marker has only 16 bits. (See the attached page 5 of ISO/IEC 15444-1:2000(E).) There is not adequate description to enable a person to follow to put invalid file data in COM markers. The Examiner understands that a COM marker segment may have adequate bits to provide information about the invalid file data. Furthermore, the Applicants neither provide adequate description to enable a person to follow to put invalid file data even in COM marker segments.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for the following reasons.

There are insufficient antecedent bases for the following limitations.

- Claim 1 recites the limitation "the replacement tile" in line 8.
- Claim 7 recites the limitation "the replacement tile" in line 10.
- Claim 8 recites the limitation "the replacement tile" in line 9.
- Claim 9 recites the limitation "the replacement tile" in lines 8- 9.
- Claim 16 recites the limitation "the replacement tile" in lines 10-11.
- Claim 17 recites the limitation "the replacement tile" in lines 9-10.

Claim Interpretation

11. For examining Claim 17 over the prior art, the Examiner makes the following interpretation:

- Replace "A method" in line 1, Claim 17 to "An apparatus".

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1-16 and the interpreted Claim 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marcellin et al. ("An Overview of JPEG-2000," Michael W. Marcellin, et al., Proceedings of Data Compression Conference, DCC 2000, 28-30 March 2000, pages 523-541) in view of Larsson et al. (US patent application publication 2003/0110299.)

For Claims 1-6, Marcellin teaches a method comprising:

- editing a portion of a codestream; (section 5.4)
- generating a replacement portion for the portion of the codestream by (1) making size of the replacement portion equal to size of the portion of the codestream by adding padding to

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the replacement tile if the replacement tile is smaller than the portion of the codestream or (2) quantizing the replacement tile if the replacement tile is larger than the portion of the codestream; (section 5.4; Claim 1 recites an alternative requirement. Based on the specification, the Examiner makes the above interpretation. Marcellin's teaching thus meets the second requirement. In JPEG 2000, truncation is considered as quantization.)

-- wherein quantizing the replacement tile comprises truncating packets in the replacement tile until the size of the replacement tile is equal to the size of the portion of the codestream; (section 5.4)

-- wherein creating a replacement tile includes providing an indication in the replacement tile that other portions of the codestream contain useless data; (sections 3, 5; Marcellin uses JPEG-2000 bitstream. JPEG 2000 standard ISO/IEC 15444-1:2000(E) teaches (1) in page 22, section A.4.2 that Tnsot indicates the number of tile-parts included in a tile and (2) in page 14, section A.1.3 that after truncation, a marker segment of a tile shall be updated. The marker segment includes an indication of useless data in the original bitstream, namely the tile-parts after Tnsot are truncated.)

-- wherein the other portions of the codestream comprises tile-parts in the codestream subsequent to the portion of the codestream; (section 5.4; The truncation in a JPEG 2000 stream inherently requires that the other portions are behind the selected portions.)

-- wherein the portion comprises at least one of a group including; a tile, a tile-part, or packet; (section 5.1)

-- wherein the portion covers at least one of a group that include an area, a resolution, a component, and a precinct. (section 5.1)

However, Marcellin does not teach explicitly features related for determining, decoding, editing, and recompressing a portion as recited.

Larsson teaches a method comprising:

- determining a portion of a codestream to edit; (section 0076)
- decoding the portion of the codestream; (section 0077)
- performing an edit to the decoded portion of the codestream; (section 0077)
- recompressing edited data into coded data. (section 0077)

It is desirable to provide a client the capability of requesting a better quality for regions of interest (ROI) in an image delivered by a server. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to apply Larsson's teaching to determine, decode, edit, and recompress a ROI and store the recoded data in the JPEG 2000 format taught by Marcellin, because the combination provides a client an additional capability of receiving images with improved ROI quality.

For Claims 9-15, because Claim 9 recites an alternative requirement "generating a replacement portion for the portion of the codestream by (1) making size of the replacement portion equal to size of the portion of the codestream by using a marker to an appropriate length if the replacement tile is smaller than the portion of the codestream or (2) quantizing the replacement tile if the replacement tile is larger than the portion of the codestream, the Examiner selected the second requirement for examining Claims 9-15 over the prior art. With such selection, Claims 9-14 are the same as Claims 1-6. Therefore, Claims 9-14 are similarly rejected. Because Claim 15 further modifies the non-selected first requirement, it is also rejected.

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Both Marcellin (sections 1 and 4) and Larsson (the server shown in Fig. 1, section 0113) teach systems to implement the above methods. Therefore, the combination of Marcellin and Larsson also teaches the corresponding apparatus of Claim 8 and the interpreted Claim 17.

In section 4, Marcellin teaches a JPEG-2000 coding engine with JPEG-2000 algorithm. Furthermore, Marcellin shows that the JPEG-2000 coding engine with the JPEG-2000 algorithm has been used to evaluate JPEG-2000 compression as shown in section 6. For the JPEG-2000 coding engine to operate, the JPEG-2000 algorithm shall be stored in a memory in the engine or system. The memory such as a hard disk is the article of Claims 7 and 16.

Examiner's Statement

14. None of the prior art teaches the feature "replacing useless data in a *marker*" required in Claims 18-21. Although the combination of Marcellin and Larsson as discussed above teaches replacing useless data with information provided in a *marker segment*, it does not teach the feature.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wenpeng Chen whose telephone number is 703 306-2796. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K Moore can be reached on 703 308-7452. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular

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communications and 703-872-9306 for After Final communications. TC 2600's customer service number is 703-306-0377.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-4700.

Wenpeng Chen
Primary Examiner
Art Unit 2624

February 20, 2004

A handwritten signature in black ink, appearing to read 'Wenpeng Chen', with a long horizontal flourish extending to the right.